

DRAFT REPORT

5th meeting of the GRSG informal group on Accident Emergency Call System (AECS)

Venue: Centro Ricerche Fiat, Str. Torino 50, 10043 Orbassano (TO), Italy
Chairman: Mr. Denis Zagarin (RUS) (zagarin@autorc.ru)
Secretariat: Mr. Olivier Fontaine (OICA) (ofontaine@oica.net)
Dates: 2-4 September 2014

1. Welcome and Introduction

The Chair informed about successful tests that have been conducted in RUS. The first crash tests of a vehicles, equipped with accident emergency call systems, were conducted at the NAMI's Testing Centre to evaluate certification testing procedures for assessing conformity with the requirements of the Customs Union Technical Regulations "On the safety of wheeled vehicles" for automatic activation of system in collisions.

NAMI's Testing Centre has been registered as a Technical Service 22/B in the frame of 1958 Geneva Agreement and accredited as the Testing Centre for Motor Vehicles, Spare Parts and Accessories and performs comprehensive certifications and vehicle type approval testing for assessing in conformity with the requirements of the Customs Union Technical Regulations "On the safety of wheeled vehicles" (TR CU 01/2011) for vehicles.

The performance of the accident emergency call system which has been installed in a vehicle of category M1 were evaluated during the crash test in accordance with the UN Regulation 94 and UN Regulation 95. During the tests the terminals of two different manufacturers have been installed – Cesar Satellite and Fort Telecom. All terminals survived after collision and transmitted correct MSD information.

The pilot tests at NAMI' Testing Center provided an opportunity to evaluate and develop test method and get ready to provide certification tests of complete vehicle in connection with the accident emergency call system and device installation in accordance with the requirements of the Technical Regulations of the Customs Union, which will come into force on 1 January 2015.

2. Approval of the agenda

Document: AECS-05-01 (Chair - Secretariat)

The agenda was approved with no change.

3. Revision and approval of the draft minutes of the 4th meeting

Document: AECS-04-14 (Chair) draft report

The report was approved with no change.

4. Outcomes of GRSG-106 (5-9 May 2014) and 163 session of WP.29 (24-27 June 2014)

Documents: ECE/TRANS/WP29/GRSG/85 (UN Secretariat)
GRSG-106-03 (AECS informal group)
GRSG-106-31 (RUS, as Chair of AECS informal group)
ECE/TRANS/WP29/2014/1110 (UN Secretariat)

WP.29-163-12 (OICA)

The Chair informed having reported to GRSG-106 about the progress of work of the group. GRSG accepted the extension of the informal group mandate until October 2015, as indicated in the revised Terms of Reference (Annex 4 of GRSG report – document ECE/TRANS/WP29/GRSG/85e).

The Secretary pointed out that even with the extension of mandate, the target is still a challenge.

At WP29 as well, some discussions took place about the possibility to introduce connectivity requirements into UN regulations. D questioned whether WP29 well understood the problem faced by the informal group, i.e. harmonization of connections to the networks in the frame of the mutual recognition 58 Agreement system. The Chair deplored that the informal group did not receive the answers that were expected.

OICA presented document WP29-163-12.

RUS was confused about the presentation as it seems to contradict the informal group proposal, and questioned whether WP29 had other sources of information than that OICA presentation. RUS was keen to avoid that 3 discussions take place at three different levels (i.e. informal group, GRSG and WP29). OICA explained the concern that the solution of classes of approvals is contradictory to the principle of mutual recognition. The Secretary explained that all necessary documents are available for WP29 delegates, and that there was no agreement within the GRSG informal group on the proposal for classes of Type Approvals. OICA also clarified that the request for guidance was more a political decision, which could eventually be translated into technical solutions.

RUS suggested that the Chair prepare an explanatory document for GRSG such that GRSG can present documents to WP29.

The Secretary proposed two possible approaches:

- Put aside the question until WP29/GRSG provide guidance, or
- Prepare a solution for the 2 approaches (i.e. Classes of Type Approvals vs. regulation restricted to what is inside the vehicle)

D challenged the question above as there is a 3rd possibility by having one UN regulation per Class of AECS. RUS challenged that 3rd possibility as it does not fulfil the conditions of the 58 Agreement and the target of harmonization.

OICA pointed out as well that the phone networks are currently not harmonized and that UN regulations cannot regulate them. Some common work with ITU is necessary.

UK recalled the solution proposed by WP29 for UN R107, were there was two classes of approval (A and B) on a temporary basis.

CLEPA strongly challenged having three different regulations as it would be contradictory to global harmonization.

UK also suggested to have a wording such as “at the request of the manufacturer...”. (as currently present in UN R34 – Fire risks)

NL informed about UN R117 where there are 3 classes of tyres.

OICA pointed out that some items are regulated nationally hence cannot be regulated in the AECS UN regulation. CLEPA stressed that of course no manufacturer would present a vehicle fulfilling one class in a country not accepting that class. Yet, it is up to the Contracting Party to have a position as to whether the mutual recognition principle is acceptable since we must clarify ahead of the adoption of the regulation what happens for vehicles/devices which cannot work in certain regions.

Conclusion:

- task force on legal aspects (for investigating e.g. UN R34 and UN R117 solutions): UK, NL, RUS, D, Secretary
- Rest of the group to work on technical items.

Note: The TASK FORCE had a preliminary informal meeting during the course of the AECS-05 meeting, limited to the expert from UK and the Secretary. The experts informed the informal group subsequently in the meeting that the solutions per UN R117 was not appropriate. Yet a solution similar to that of UN R107 would worth investigation, since it seems technically feasible.

5. State of play of the EU legislation on AECS

Presentation expected from European Commission, as requested at AECS-04

The European Commission and ROK presented the status of the Ecall legislation in their respective countries per the documents AECS-05-08 and AECS-05-07.

6. Contacts with ERTICO

The informal group was informed about the competence of the company “Rohde & Schwartz”: R&S provides test methods for mobile phones, RF parameters, including GPS. The experts were made aware that R&S was asked by ERTICO to present a protocol that could be a base for assessing a positioning system, based on existing standards.

On another hand, one of ERTICO’s tasks is to develop certification processes for IVS (In-Vehicle Systems) i.e. GNSS tests, audio test, etc. There are interoperability “Testfests” organized on a regular basis, where IVS and PSAP manufacturers can test their solutions. QUALCOMM, as expert in mobile communication, and Tier 1 and some vehicle manufacturers attend the testfest events (3rd testfest is scheduled for 27-31 October 2014, in Vigo – Spain).

OICA pointed out that ERTICO are more connected to “Part I” of the future UN regulation. OICA recommended that experts from ERTICO do attend the GRSG-AECS informal group meetings such that embedded devices can be discussed with a common understanding.

It was clarified that the mobile phone Industry more talks about self-declaration, or certification while the auto Industry addresses Type Approval.

GCF (Global Certification Forum) and PTCRB (PCS Type Certification Review Board) are based on Industry commitments.

The Secretary raised the concern of a potential legal conflict if test methods and protocols under Part I of the UN regulation are based on those of simple Industry commitments.

Conclusion: the experts involved in ERTICO discussions committed to urge their colleagues to take part to the work of the AECS informal group.

7. Revision of the main pending items

Documents: AECS-05-04 (OICA)
 AECS-05-05 (OICA)
 AECS-05-02 (J)
 AECS-05-03 (J)

The expert from OICA presented AECS-05-04 as a proposal from OICA to grant approval following three possible procedures at the choice of the vehicle manufacturer.

RUS questioned the way the manufacturer would provide demonstration of triggering signal availability in case the vehicle was approved to UN R94/95 without AECS. OICA clarified that an extension of the UN R94/95 would be granted, with the necessary data.

RUS questioned the safe zone: 95% of the vehicles would have the AECD survived. OICA clarified that there exists already a safe zone definition for electric vehicle safety (UN R100 – Electric vehicles), whose justifications were taken by OICA. OICA informed that the idea is only taking the concept of the safe zone, rather than copy/pasting the requirements of UN R100.

RUS pointed out that the concept is designed for tanks and pipes rather than for devices like AECD with wires, loudspeakers, etc. RUS found the approach acceptable for vehicles out of the scope of UN R94/95 equipped with an automatic triggering system, but questioned the opportunity of that approach for vehicles included in the UN R94/95 scopes. In addition, the concept of safe zone is developed from real world rather than UN R94/95 environment. OICA supported that comment but pointed out that real world study is advantageous compared to UN R94/95 environment which is only a simulation of the real world.

QUALCOMM questioned AECS operation verification.

The European Commission found the presentation interesting as based on the discussion of last meeting.

The experts raised two points:

- Alternative procedure in slide 11, and procedure at the choice of the OEM, because the OEM would always chose the simplest way, i.e. probably the 3rd procedure. The expert from the European Commission would suggest that the 3rd procedure is performed only in justified cases

- Origin of the pulse test: UN R17? No, the draft text contains in [] a value of 75G, coming from the GOST Standard 7358.

Qualcomm questioned the device test for antenna, where it should be in presence of the vehicle roof. OICA clarified that those levels of details must be verified at device level.

Qualcomm also questioned the details of the audio check; limited to the 2-voice communication in the OICA proposal, while more criteria are necessary, like the avoidance of echo.

The Chair found necessary that the experts of passive safety are consulted about the green zone, in particular about the %age of resistance (5% vs. 1%). He suggested that this be discussed further at the next meetings.

D found the safe zone approach safer than the UN R94/95 approach because it takes into account e.g. the rear impacts. In addition, there exists the proposal for a device sled test, with higher decelerations than those of the impact regulations, i.e. TÜV is ready to accept the safe zone approach as proposed by OICA, subject to further in-depth evaluation. The power supply could be that of the hazard warning lights. But the Technical Service could not accept reports produced by the manufacturer, rather should be able to perform the test independently or as a witness.

OICA informed that the safe zone concept is based on 9,000 crashes on different vehicles.

OICA presented AECS-05-05

An editorial error was raised: Reference to paragraph 14.1.1. in paragraph 16.1 should read Table 1.

RUS believed that the compliance verification based on OEM documentation should be reserved for special cases (vehicles previously approved w/o AECD, etc.). In addition, about Annex 8, RUS questioned the relevancy of the proposal, e.g. HMI confidence in case the vehicle is in an underground parking. HMI should be able to identify which component has failed, or what is the source of the failure.

OICA clarified that the presence of Annex 8 is based on the fact that all the requested conditions for testing in one Contracting Party could be not available in the Contracting Party where the vehicle is to be tested (e.g. the frequencies or GNSS).

The Secretary questioned how to address the vehicles that are out of the scope of UN R94/95 but nevertheless equipped with AECD, then a proper wording would have to be found for restricting the procedure for these vehicles.

The Secretary pointed out that the document clearly shows that Part I must be finalized if the group wants to achieve its target. RUS recalled that the original RUS proposal did contain all what is needed. CLEPA informed to be currently working on Part I, but not yet in a position to present procedures such as those of the OICA document AECS-05-05.

The Chair requested the delegates, in particular those from Contracting Parties, to indicate their opinion about the OICA presentations and documents.

RUS could accept the OICA approach in general. Still some clarifications are needed (e.g. HMI)

Italy agreed that the OICA approach is correct, with the need for some clarifications.

The European Commission welcomed the general approach, with some details to be added as mainly the structure was presented. The expert in particular mentioned the need to better formulate the vehicles that cannot be equipped with triggering system vs. those having no triggering system. The expert challenged the free choice for the OEM to decide on the homologation procedure.

D supported the European Commission

J supported the OICA approach

UK could support the general approach but needed to have more details. In particular about who chooses the approval procedure.

NL supported the general structure of the OICA document, with a reservation to the reference to UN R10. NL could support the European Commission position.

OICA raised the need for support from CLEPA and the suppliers in general for filling the empty spaces in Part I.

CLEPA informed being working on Part I aiming to table it at next meeting, taking into account the RUS proposal as much as possible. About the OICA presentation, CLEPA could support it in general, subject to a deep study of the additional constraints demanded to the components.

Conclusion: the group agreed to move further on the basis of the document AECS-05-05.

J presented document AECS-05-02.

RUS could agree that the frequencies for GSM etc. could be referenced in the national regulations but found necessary that the communication standards and format of data transmission be in the AECS regulation.

J stressed that the idea covered all details, including the network. J found not necessary to adopt the standards in the AECS regulation, they should be described in the national regulations.

OICA suggested that in the frame of the classes approach, each class would specify e.g. whether the AECS must comply with 2G, 3G, with no detailed description of what means 2G, 3G. In that case, the J request would be in line with the “classes” approach.

D pointed out the intrinsic conflict with the concept of mutual recognition.

J stressed that a lot of different frequencies are existing in different countries and also are rapidly evolving and as a consequence could not be regulated.

CLEPA reminded that the J Helpnet is purely private and that there is currently no plan to regulate Ecall in Japan. This is not the case in RUS and EU.

UK recalled that in EU there is only recommendation to the mobile operator to handle the Ecall data. A debate took place on what would have to be in the regulation, to which detail should the provisions go. The document was improved during the meeting.

Conclusion:

- The group agreed to keep this document in account, and to rely on the “legal aspects” task force decided earlier to investigate the possibilities.
- The question of positioning system is already addressed and an answer is expected from GRSG;
- The communication to the mobile phone networks and PSAP are to be dealt with by the task force.

Note: the improvements to document AECS-05-02 were lost with the Secretary’s computer robbery.

J presented their document AECS-05-03 as homework from the last meeting. J stressed that a manual triggering system would be mandatory on all M1/N1 vehicles.

RUS could agree with this approach.

The European Commission had concern about the split between auto and manual triggering. They found it one system with two functions.

The UK pointed out the difference of philosophy between the current approach where the AECS is an automatic system with a possible additional manual triggering, and the J approach where an AECS is a manual system with possible additional automatic triggering. The UK representative requested time to investigate the J proposal.

The J delegate informed that in J about more than half the vehicles are not equipped with side airbag even though they pass UN R95. The delegate questioned how to deal with that situation. The OICA expert pointed out that the vehicle may have a separate triggering, not related to the airbag, and that it should still be discussed within the informal group whether these vehicles, included in the UN R95 scope but without airbag, would have to be equipped with automatic AECS triggered in the conditions of the UN R95 impact test.

RUS indicated that the J proposal matches the RUS situation and proposal.

The European Commission said that AECS is one system with two functions, and that when fitted, it must be automatic and manual. Vehicles that cannot be equipped with an automatic triggering system would be exempted from auto AND manual triggering system hence from AECS.

UK found necessary to investigate further.

D and NL supported the European Commission position.

ROK requested time to investigate.

OICA clarified that their position was indicated in the documents AECS-05-04 and 05

CLEPA had no opinion.

NL suggested including the manual vs. automatic triggering system into the definition of the classes of approvals.

Conclusion: decision to be done at AECS-06, awaiting input from UK and argumentation from OICA

This item was subsequently re-discussed.

J explained that in J 38% of road accidents are on pedestrian, and J was keen to protect drivers hence the need for a manual operation. RUS confirmed that there is a number of use cases justifying the mandatory

manual Ecall operation. The RUS experts informed that, should those vehicles be exempted in the UN regulation, they would fall into the national requirements.

UK was keen to get exemptions for special purpose vehicles and small series.

OICA clarified that the vehicles targeted by the right column are quite rare. The expert cited old 4X4 vehicles which quantity is not relevant for mandatory manual control. The expert added that all the other vehicles in the table would be fitted with auto and manual triggering. The expert from OICA explained in addition that this small proportion of vehicles, if they have to be obliged to be equipped with a manual triggering, would have to be equipped with GNSS and Ecall and mobile phone communication, hence there would be no balance with the safety benefits.

The UK were keen to get justification that fitting those vehicles with Ecall is of benefits. The expert pointed out that at the end, a cost/benefits analysis must be present behind the choices.

Concerning the 4th column, all experts agreed that those vehicles would be equipped with both manual and automatic triggering, and that at least the manual triggering must be tested.

Concerning the vehicles in the last column, the representative of the European Commission presented Article 8 of the European Commission proposal of June 2014, providing exemptions. The document of the Council in its article 2 clarifies that only the vehicle that cannot be equipped for technical reasons can be exempted. This document has more legal value than the European Commission proposal as later in the legislative process.

The document of the European Parliament (EP) is basically aligned on that of the European Commission with more details. This EP document has the same legal value as that of the Council.

Concerning the “embedded issue”, Recital 10 of Article 4, paragraph 4 of the European Commission proposal makes the “cell phone” solution out of the scope of the regulation because not fully integrated in the Ecall system. The Council did not challenge the European Commission proposal, yet the EP in its Amendment 37 specifies that only embedded Ecall in-vehicle systems are subject to approval. As explained in the European Commission presentation AECS-05-07, the “trilogue” will start toward a final decision.

It was suggested that the group proceeds with the table (last column) as it is.

J committed to check internally which kind of vehicles could be automatically exempted from Ecall fitment.

Conclusion:

- The group agreed that the following provision (wording may be improved) would be integrated in [] in the draft text of the regulation: “vehicles not in the scope of UN R94 and R95 and not fitted with an automatic triggering system shall be excluded from the scope of this regulation”. *
- J to check internally
- Item to be reviewed at next meeting.

* the European Commission representative had a reservation on this sentence.

7.1. EMC, climate resistance and mechanical resistance

Background:

- Question about simply referring to UN R10, or including all necessary requirements into the regulation
- not all UN R10 requirements are necessary for AECD/AECS
- similar background for climate and mechanical resistance
- outcomes of AECS-04:
 1. EMC: reference to UN R10, with no reference to the series of amendments. Reservation from the NL.
 2. Climate and mechanical resistance: Item to be re-discussed at next meeting, informal group to wait for final position from RUS.

Reference to UN R10:

- The Secretary put the following sentence on the table as a proposal for solving the problem of EMC requirements: “**The effectiveness of the AECD shall not be adversely affected by**

magnetic or electrical fields. This requirement shall be met by ensuring compliance with the technical requirements and transitional provisions of Regulation No. 10.05.”

- NL supported the wording in the left column of document AECS-04-02 (draft paragraph 6.1. - page1), i.e. clear mentioning of the series of amendments, such that the Technical Services do not have to investigate which version of the regulation is applicable at the time of Type Approval, and because this would promote harmonization. With the revision 3 of the 58 Agreement, it will be possible to grant approval according to previous series of amendments to a regulation, and the NL want to prevent vehicles approved to an obsolete version of the regulation.
- The experts were informed that GRSP held similar debates and solved it by not mentioning the series of amendments, taking into account that IWVTA will permit whole vehicle Type Approval in accordance with the rules in force in the region/country applying it. The Secretary pointed out that mentioning the 05 series could become overregulation for Contracting Parties not mandating the latest series. In addition, the experts were informed that the 05 series only deals with on board high voltage charging system, with no expected influence on AECS. OICA hence challenged the reference to a particular series of amendments.
- It was pointed out that the manufacturers should avoid double testing, if the device is already approved to UN R10, then there should not be the necessity to test it again when fitted in the vehicle.
- It was suggested to put the sentence in [] until the group finds a solution at the end of the work.

Conclusion: wording to be integrated in [] in the draft regulation, possibly with different wording for the device and the vehicle, and informal group to resume consideration of this item at a further step.

Climate resistance:

- RUS still believed that UN R116 was the right example, but realized that regulating climate resistance nationally could be acceptable in view of the Russian particular climate. For the resistance to mechanical impact, RUS accepted to regulate nationally the tests related to usual utilization, but required that the tests related to the impact conditions be part of the regulation.
- D informed that the CMS informal group had similar debates, and concluded that the OEM must warn when the system does not work anymore, e.g. when temperature is such low that the CMS fails, then a warning must be provided. The expert also pointed out the AECS is a kind of “sleeping system” which may have to function after 10 years of sleep. D found this a political decision, and that deleting the provisions would imply a sentence saying that climate resistance is regulated nationally if a Contracting Party wants to regulate it nationally.
- OICA pointed out that functionality after 10 years is a matter of PTI. In addition, such good resistance to climate during such a long time would be of no advantage if there is no guarantee that the networks are present; there would be a need that the evolution of the networks and connectivity be monitored.
- A debate took place about the understanding of the 58 Agreement when there is no provision in a regulation (e.g. on climate resistance): in e.g. UN R13H, there is no such provisions, hence it is assumed that the brake have to function in all climate conditions, vs. it is assumed that climate resistance can be regulated nationally.
- D was of the opinion that, if the group decides that AECD is a component key to safety, then climate resistance provisions should be part of the regulation. If not, then those provisions are not necessary. As an example, the crash tests are performed at about 20°, with no clue on whether the vehicle can similarly resist at lower temperatures.
- No Contracting Party was keen to have climate resistance provisions in the regulation. OICA and CLEPA supported that point of view.

- RUS feared that regulating climate resistance nationally would be contradictory to the 58 Agreement and suggested that general requirements are included into the regulation, with no requirement that there is a test for assessing compliance, rather documentation provided by the manufacturer.
- OICA challenged that approach as well. The expert added that all systems and components are anyway tested according to severe climate conditions while the regulations provide for a minimum level of performance, hence the question was more related to the principle: necessary border between Type Approval and internal compliance tests.
- UK pointed out that no evidence was provided showing the necessity of such climate resistance provisions, in particular in view of the number of other electronic devices, sometimes more safety relevant than AECD, have no such provisions. RUS pointed out that AECD must withstand high decelerations in impact conditions, and that temperature may influence the results, subject to deeper analysis.
- NL supported that no provisions are necessary as Industry standards are tough enough.
- CLEPA had the experience that their customers are usually requiring performances far above those that can be found in any regulation, hence there would be no added value of climate resistance provisions. In addition, they would bring additional costs.
- The European Commission found good that the debate took place again, showing that no evidence were provided convincing about the necessity for climate resistance provisions in the regulation.

Conclusion: no provisions for climate resistance in the UN regulation.

Mechanical resistance:

- TRL clarified that there are 2 aspects: every day resistance to mechanical constraints, and resistance to impact.
- The experts agreed to discriminate between the two types of mechanical constraints.
- The Secretary recalled the positions of Italy, Japan and NL of the previous meeting that the resistance to mechanical constraints under day-to-day utilization conditions should not be part of the regulation.
- CLEPA and D supported that point of view.
- D and European Commission found the resistance to impact one of the major points of the regulation and were keen that it is integrated into the requirements.
- RUS pointed out that UN R79 (Steering system - paragraph 5.1.4.) does contain requirements for normal conditions of use.
- It was pointed out that a failure in UN R116 (e.g. immobilizer or ignition) would be of immediate effect on occupant and traffic safety. Hence the need for provisions related to daily utilization in those regulations. Yet the AECS regulation does not need such requirements.

Conclusion:

- No provision for daily utilization
- Detailed requirements for resistance to impact in the environment of the crash test regulations (UN R94/95) – device under sled test conditions, vehicle according to UN R94/95 environment.

7.2. Functional testing and procedures of vehicle homologation

Background:

- Question on whether UN R94/95 are relevant for assessing AECD/AECS resistance to crash
 1. Worst case configuration
 2. AECD/AECS post-crash functionality assessment
- Proposal to perform a separate AECD sled test
- Conclusions of AECS-04:
 1. Table of scope vs. mandatory test set up as in report of 4th meeting

2. Each cell to be further reviewed at 5th meeting because position of each party must be confirmed
3. all parties committed to confirm their position
4. Each test to be described in details at future meetings.

The Chair and Secretary recalled that document AECS-05-03 (J) was an input as requested in the conclusions of last meeting.

Document AECS-05-05 (OICA) was also an input related to this item.

The group agreed that the necessary debates related to the table took place at the time of the documents AECS-05-04 and 05-03 (item 7 of the agenda above), with comments from the European Commission on the OICA interpretation of “vehicle without triggering system” and those of J under document AECS-05-03.

Conclusion: see item 7 above

7.3. AECD homologation

7.3.1. Navigation solution

Background:

- GNSS Industry existing assessment test methods to be reviewed by the group
- Question on whether the regulation should mandate GNSS for achieving accuracy in positioning (design restriction vs. technical necessity)

Discussions:

- R&S presented the document AECS-05-09 as an attempt to set up a base for navigation performance test method.
- A debate took place on the conditions of the test. It was considered necessary that a moving scenario be simulated because of the possible heart attack manual activation scenario.
- OICA informed that there will be three GNSS positioning standards dedicated to ITS EN16803-1-2-3.
- It was pointed out that the group faces the choice between 3 possibilities for assessing positioning system accuracy, i.e. R&S proposal, EN new standards, RUS original proposal. Yet only one of these possibilities is currently available as a text. OICA stressed that the group still did not decide the level of precision of the positioning system.
- RUS recalled their initial performance requirement of 15 m. RUS justified that level of accuracy as a level easily achievable by current devices, and accurate enough for rescue team to locate a vehicle. RUS pointed out that accuracy is not the only important parameter, but also availability of solution, stability.
- RUS finds the following parameters relevant for GNSS performance level assessment: accuracy, availability of the solution in difficult conditions, and stability of the solution.
- NL found necessary to add response time and time to 1st fix.
- J informed that input about parameters under the Helpnet system will be provided to the pilot.
- Mr. Fernandez informed that that the 1st part of the standard will be finalized end of the year 2014. He found that the scope of the standard is very ambitious, too ambitious for the Ecall application, more relevant for safety critical applications like e.g. autonomous vehicles. In addition, the standard will be a bit late. He was of the opinion that the GNSS test should be simple. Mr. Fernandez agreed to take part of the work for the definition of GNSS assessment method. Mr Fernandez in addition informed that the EU is starting a campaign for testing the Galileo signal. On September 5 there will be a visit of the European test facility that will permit to test the Galileo constellation.

Conclusion:

- Mr. Henchoz (CLEPA) elected as pilot for drafting a text for this part of the regulation, and welcoming the support from any expert.

- RUS proposal to be the basis as the only draft currently available
- Mr. Favreau, Mr. Klimovskiy as well as colleagues from Galileo Agency (Mr. Fernandez), and hopefully Mr. Kaisti Kim (U-Blox), to support Mr Henchoz,
- Assessment of the relevancy of the key parameters, i.e. accuracy, availability of the solution in difficult conditions, stability of the solution, response time and time to 1st fix, resistance to harmonic and pulse interferences.

7.3.2. Emergency call assessment

Background:

- ITS Industry existing assessment test methods to be reviewed by the group

Discussions:

- The group was informed that U-Blox has expertise on this field, yet the expert was not present. RUS recalled that a test method was present in the original RUS proposal.
- CLEPA committed to undertake the elaboration of a test method, based on the RUS original proposal.
- The support from other partners, like R&S, Qualcomm, etc was welcomed.
- R&S informed that some defined tests are currently existing. ERTICO is currently elaborating an end2end testing, from the Ecall to the PSAP. At the next Tesfest in Spain there will be 27 tests performed in the results will be available at the next meeting.
- The Chair of the group that develops that CEN standard recommended that a reference to the standard be placed into the AECS regulation, rather than a transfer into the regulation.
- The experts were informed that some discussions are ongoing at GRSG and WP29 levels because a legislation must be available freely to the public, and it would be wrong to refer to a non-available standard.
- In addition, the standard deals with the three parties that are involved in an Ecall, while only the emission of the data is of interest to the regulation. The standard should be taken as a source of information.
- D recalled that in an approval regulation, there is a need for clear and simple performance requirements with “shall” requirements.
- All agreed that it is relevant to base the work on the RUS proposal, as it already cleared up the simulation of the infrastructure.

Conclusion:

- CLEPA (Mr. Henchoz) to be pilot
- CLEPA to present a draft test method at 6th meeting, probably based on the RUS original proposal (AECS-03-04).
- CETECOM, Mr. Klimovskiy, FIAT, Magnetti-Marelli, Renault to help CLEPA.

7.3.3. Voice connection assessment

Background:

- ITS Industry existing assessment test methods to be reviewed by the group

Discussions:

- RUS recalled that their original proposal did contain a draft. RUS commented that voice communication is also part of the vehicle assessment, and hence questioned the way to discriminate what is part of the device and what is part of the device (Part I vs. Part II)
- OICA pointed out that no high quality is necessary, only the existence of the voice communication.
- RUS was of the opinion that while the test is a device test, it cannot be performed without the vehicle.
- D, as Technical Service recalled that the regulation should provide minimum level of requirements, or the Ecall would become the most expansive device in the vehicle: only simulation of the reality is necessary. OICA also pointed out that the voice connection is not that important, compared to the MSD transmission, which is the most important.
- A debate took place on the level of performance necessary in the homologation regulation.
- UK suggested that the existence of a mobile phone kit is deemed to be Ecall relevant, such that a manufacturer showing this existence can be exempted from the voice communication test. The expert proposed that data be collected on the system surviving to crash test.
- The group made the difference between the test assessing the quality of the voice communication, and the tests dedicated to assess vehicle resistance to crash.
- TRL suggested a visual check of the component after the full crash test, recognizing this as a Part II test.
- The group then was converging toward the following solution:

1. voice communication in normal conditions (Part I of the regulation)
 2. visual check or subjective test after full crash test (Part II of the regulation)
- In each case, need for a PSAP simulation.

Conclusion:

- CLEPA pilot: Mr. Henchoz
- OEM pilot: wait for CLEPA proposal.
- proposal to be presented by CLEPA at next meeting following the above lines

8. Classes of Type Approval

Document: AECS-04-05

Background:

- UN regulations imply interoperability and require mutual recognition
- Approval tests can only simulate the reality, i.e. cannot capture all real world situations

Discussions:

- The UK presented the results of some investigations that were conducted the evening before, toward the UN R117 approach, the UN R34 approach and the proposal for different classes of Type Approval (AECS-04-05).
- It appeared that the UN R117 approach was not appropriate for the situation faced by the informal group. Yet a research in UN R107 was considered appropriate.
- The Secretary explained that the proposal would be supported by the last revision of the 58 Agreement as long as it contains the flexibility for particular provisions within each regulation.
- It was suggested that a proposed wording be produced prior to the GRSG session, such that the GRSG experts could make their opinion about the proposal, together with the task force established earlier in the meeting.
- RUS raised the concern of SMS as a reason to subdivide the Euro-RUS Class. A debate took place on the danger in EU of sending an SMS which would be lost in the network. This was considered unfeasible because the European Commission already decided to avoid those SMS, for legal reasons (indication that an SMS was sent, while it will not reach any recipient).
- As a conclusion, there is no means to construct a Class common to EU and RUS.
- The definition of class will have to integrate all the items that are compatible to one region/technology (e.g. Helpnet, SMS provisions, in-band modem, etc.).
- The possibility to use mobile phone was raised as a possible other discriminating factor.

Conclusion: solution to be further investigated.

9. Schedule for further IG meetings

- 6th meeting takes place in Prague (CZ) on 18-20 November 2014
- 7th meeting can be held in Russia on 3-5 March 2015 (invitation from RUS).
- 8th meeting can take place [9-11 or 16-18] June 2015 (Paris or London – DfT or SMMT), yet conflict with ESV conference in Gothenburg (S) on 8-11 June.